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AUTHOR Eddins, Diane D.
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ABSTRACT

A nine-year summary of the academic performance of "high-risk" students at the University of Pittsburgh is presented. The subjects investigated were 1,770 students who entered the University-Community Educational Programs (U-CEP) from 1968 to 1976. The report focused on the following areas: student academic backgrounds; student first-year performance; student attrition rates; and student graduation rates. Comparisons were made between U-CEP students and regular admits. The results showed that given the opportunity and adequate support, the "high-risk" student can succeed, although at a lower rate than the regular-admit student. (Author/SPG)

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A LONGITUDINAL ANALYSIS OF THE PERFORMANCE OF "HIGH-RISK" STUDENTS

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University of Pittsburgh

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ABSTRACT

A Longitudinal Analysis of the Performance of "High Risk" Students

Diane D. Eddins, The University of Pittsburgh

This paper represents a nine-year summary of the academic performance of "high risk" students at The University of Pittsburgh. The subjects investigated were 1770 students, entering the University-Community Educational Programs (U-CEP), 1968-1976. The report focused on the following areas: (1) student academic backgrounds; (2) student first-year performance; (3) student attrition rates; and (4) student graduation rates. Comparisons were made between U-CEP students and regular admits. The results showed that given the opportunity and adequate support, the "high risk" student can succeed, although at a lower rate than the regular admit student.

A LONGITUDINAL ANALYSIS OF THE PERFORMANCE OF "HIGH-RISK" STUDENTS

The past decade has shown a substantial increase in institutional programs designed to enhance educational opportunities for disadvantaged students. Characteristic of these programs are special admission procedures, counseling and tutorial support services, special course work, and financial assistance. The typical program-student is a member of a minority group; comes from a comparatively lower socioeconomic background; has academic deficiencies; and has been provided with little or no pre-college exposure. Several names have been given to these students, such as culturally-deprived, educationally-disadvantaged, educational-opportunity students, non-traditional students, and special admits. Usually they are considered high academic risks in terms of traditional predictive criteria.

A major area of concern and research on these special programs has been their success as measured by the students' performances. Studies have varied substantially in terms of population size, variables considered, and reported results. Muehl and Muehl (1972) reported a 76 percent retention rate after the second semester and 46 per cent after the fourth semester. Jensema and Lunneborg (1970) indicated a 69 per cent rate after the first year, and Klingelhofer and Longacre (1972)

reported a 41 per cent rate after seven semesters, compared to 52 per cent for regular admits. Bynum (1972) surveyed 469 four-year institutions with special programs, and reported a 19 per cent first-year dropout rate and grade-point averages similar to regular admits. Bynum also advocated the use of caution in interpreting results, because often they are based on remedial or less-stringent course work and lighter course loads. Loeb (1974) indicated that delayed drop procedures can inflate first-year survival rates. Loeb reported a 40 per cent graduation rate, compared to 60 per cent for regular admits. Other studies reporting student performance rates are Kitano and Miller (1970), Tinto (1974), and New York State (1975).

The University-Community Educational Programs (U-CEP) was designed for "high-risk" students at the University of Pittsburgh. It provides admission, courses, and counseling support. U-CEP was started in 1968. According to traditional University admissions criteria, the U-CEP-type student (predominately Black), in prior years, had been denied admission. The information provided in this report represents a nine-year summary of the academic performance of these students.

METHOD

The subjects investigated were 1,770 students entering U-CEP, 1968-1976. The report focused on the following areas:

1. Student academic backgrounds-A comparison was made between the academic backgrounds of U-CEP students and regular admits, to show why the U-CEP student is placed in a special program.

2. Student first-year performance-The performance of students was examined in terms of their credits passed and achieved grade-point averages. Probation rates were viewed by year, and comparisons were made between Pittsburgh inner-city U-CEP students and other U-CEP students.

3. Student attrition rates-An examination was made of student attrition rates to determine what percentage of students leave the program and during which phase of their academic year.

4. Student graduation rates-The student graduation rate was presented for each year. Major areas of concentration were examined and a profile of a "successful" U-CEP student was presented.

RESULTS

Table 1 compares the academic background of regular admits (RA) and U-CEP students. RA high school ranks average in the 81st percentile (1/5), while U-CEP student ranks vary from the 70th percentile (2/5) to the 47th percentile (3/5). There is an average difference of SAT scores of 156 (verbal), 182 (math), and 388 (combined). The lower U-CEP SAT scores for 1976 reflect a move by the University to expand its admissions criteria to include former high-scoring U-CEP students as regular admits.

Table 1

Academic Background Comparison

	High School Rank Percentile (5th)		Avg. SAT Combined		Avg. SAT Verbal		Avg. SAT Math	
	U-CEP	RA*	U-CEP	RA*	U-CEP	RA*	U-CEP	RA*
1968	70(2/5)	82(1/5)	806	1144	388	559	418	585
1969	52(3/5)	83(1/5)	766	1138	386	556	380	582
1970	47(3/5)	78(2/5)	733	1103	362	539	371	564
1971	65(2/5)	82(1/5)	814	1070	399	520	415	550
1972	64(2/5)	81(1/5)	747	1080	369	520	378	560
1973	64(2/5)	82(1/5)	756	1080	368	520	388	560
1974	56(3/5)	82(1/5)	710	1070	350	510	360	560
1975	62(2/5)	83(1/5)	720	1050	350	500	370	550
1976	60(2/5)	82(1/5)	690	1050	340	500	350	550

*Years 1968-1973 include U-CEP students.

Student first-year performance is shown in Table 2. The first year is defined as two completed terms. Students are expected to pass, minimally, 12 credits per term or 24 credits a year, and maintain a 2.0 grade-point average. Performance below these levels is probationary. The table indicates that for each year, the average credits passed is at a probationary level (below 24 credits), although generally students maintain a 2.0 grade-point average. The number of students on probation each year ranges from 53 per cent to 80 per cent. Some students are on probation because of credit deficiencies; others fall below the required grade-point average; but the majority on probation fall below standards on both credits passed and grade-point averages. Often, attenance in the summer term enables students to reach satisfactory performance levels before the end of the full academic year.

Table 2
First-Year Performance

				Probation Status					
	Class Size (N)	Avg. CR Passed	Avg. GPA	Total %	CR %	GPA %	Both %	Pgh. %	Other %
1968	50	18	1.72	80	24	4	52	85	66
1969	117	17	2.35	69	41	1	27	78	44
1970	259	16	2.16	73	35	2	36	77	68
1971	185	20	2.28	65	29	5	31	69	64
1972	272	20	2.19	62	30	5	27	69	54
1973	246	22	2.20	53	14	7	32	70	45
1974	256	22	1.98	61	15	9	37	70	58
1975	207	21	2.00	63	11	12	40	85	59
1976	178	20	1.98	56	13	9	34	74	51

The table show that students from Pittsburgh's inner-city school system consistently have a higher probation rate than their U-CEP classmates. The other student category includes students from surrounding suburbs, private and parochial schools, and students outside of the Pittsburgh area, including those from out of the state.

Student attrition rates are shown in Table 3. The number of students in each class is presented, along with the number of inactive students by year. The table shows that attrition rates vary greatly from year to year. For example, 48 per cent of the 1968 class dropped out, compared to 70 per cent for the 1970 class and 47 per cent for the 1973 class. Except for 1968, the first-year attrition rate centers around 20 per cent. This figure, when compared to the 60 per cent first-year probation rates reported in Table 2, indicates that student attrition rates do not necessarily reflect student performance. They are highly affected by program termination policies, which may account for the large proportion of students who leave after their second year. In addition, an inactive student may have met required academic standards.

Table 3
Attrition Rates

	Class Size	Inactive Students		1st year	2nd year	3rd year	4th+ year
	N	N	%	%	%	%	%
1968	50	24	48	8	13	8	19
1969	117	83	71	20	16	20	15
1970	259	182	70	24	27	7	12
1971	185	112	61	27	14	12	8
1972	272	144	53	17	10	18	8
1973	246	114	47	18	16	13	—
1974	256	90	35	18	17	—	—
1975	207	40	19	19	—	—	—
1976	178	—	—	—	—	—	—

Students leave the University for several reasons (transfer, financial, personal, etc.). It has been found that approximately 10 per cent of each U-CEP class leaves the University in good academic standing.

Student success can be measured in various ways, but the one ultimate criterion of a successful U-CEP student is his or her graduation from the University. Table 4 shows the graduation rates of U-CEP students. The percentages vary from year to year, and the actual number of graduates depends on both rate and class size. The first five years (1968-1972) show that 281 (32 per cent) have actually graduated. The predicted number of graduates for the first five years is shown to be 323 (37 per cent). This is based on the number of active students remaining who are in their final year, with good academic standing. As in previous years, many of the 1973 students will graduate in their fifth year. Projections for 1974 and 1975 are also based on the number of active remaining in good academic standing, after completing their second and third years. The graduation rate is increasing yearly, and will probably

Table 4
Graduation Rates

	Class Size (N)	Inactive N	Inactive %	Active N	Active %	Graduated N	Graduated %	Pred. Grad. N	Pred. Grad. %
1968	50	24	48	0	0	26	52	26	52
1969	117	83	71	1	1	33	28	34	29
1970	259	182	70	7	3	70	27	74	29
1971	185	113	61	9	5	63	34	69	37
1972	272	144	53	39	14	89	33	120	43
Total*	**883**	**546**	**62**	**56**	**6**	**281**	**32**	**323**	**37**
1973	246	114	46	94	38	38	16	122	50
1974	256	90	35	163	64	3	1	141	55
1975	207	40	19	167	81	—	—	124	60
1976	178	—	—	—	—	—	—	—	—

*Classes 1968-1972 should have graduated

center around 55 per cent, although this may change with variations in the backgrounds of the U-CEP-type student. The University of Pittsburgh has an approximate 70 per cent graduation rate for regular admits.

A profile of a U-CEP graduates shows that on the average he or she falls in the upper 2/5 of his or her high school class and had combined SAT scores of 800 for males and 750 for females. While this is the average, 20 per cent of the student graduates fall in the 4th or bottom 5th of their high school class and/or had combined SAT scores below 700. A study done by the U-CEP office showed that the major areas of concentration for U-CEP gradates are psychology, speech, economics, education, history, political science, and liberal studies. Several students had double majors which included Black Studies. Other areas of concentration included biochemistry, chemistry, mathematics, biology, English, urban studies, sociology, nursing, social work, geography, philosophy, engineering, studio arts, languages, computer science, and the health-related professions.

DISCUSSION

The information in this report represents a summary of U-CEP academic student performance over the past nine years. It has shown that, given a chance, the "high-risk" student can be successful. Several U-CEP students have graduated with honors and many continue on to graduate school. The positive effect of college exposure on those students who did not graduate has yet to be determined.

The report shows that in some areas, student performance fluctuates greatly from year to year. Yet, what is not delineated in this report is the effect on students of fluctuations in some or all operations of U-CEP. For example, the rapid growth of the incoming U-CEP student body from 50 in 1968 to 259 in 1970 may account for the high 1969-1970 attrition rates. In addition, several changes of directorship over nine years affect program policies, which can affect student performance, both positively and negatively. Literature on special programs shows that too often program evaluation is equated to student evaluation. This report should not be considered an evaluation of the U-CEP program. It was designed to examine student performance only. The particular causes of this performance are subject to further research.

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